Complementary Feeding of Infants In Kumasi, Ghana

Research Summary

BACKGROUND

The Demographic and Health Surveys (DHS) nutrition reports for West African countries show persistently high rates of malnutrition among children under two years of age. This study of complementary feeding of infants in the Kumasi area of Ghana was undertaken to better understand and interpret the findings on the nutritional status of children in Ghana, where 35 percent of children 12-23 months old are stunted. The prevalence of stunting begins to rise at six months of age and peaks at about 21 months. This pattern suggests that the timing and content of complementary feeding of young children may explain these high rates of malnutrition.

The study was conducted in the Kumasi region of Ghana: one fieldwork site in the city of Kumasi and one in a village 25 kilometers away. The research compared the interaction of well-nourished and malnourished children with their mothers through observations in 23 households, individual interviews with 65 mothers, and four group discussions with young girls (siblings) and grandmothers. Children 3-12 months old were selected for the study by weighing and measuring children who attended a growth monitoring center and choosing those with the highest and lowest growth percentiles for the study. The study compared the infant feeding and child care practices of mothers of well-nourished and malnourished children in order to identify similarities and differences in mothers' actions.

FINDINGS

General practice

No associations were found between the standard demographic variables such as the mother's age, marital status, level of education, or occupation and the nutritional status of her child.

All of the infants in the study had been breastfed from the first or second day after birth and all but two were still being breastfed. Mothers reported that they breastfed when their child wanted the breast. which was indicated by the child's crying or seeking out the breast.

Mothers and grandmothers frequently and consistently said it was important to eat foods made from maize to increase breast milk production. Recommended foods made from maize include koko, a fermented porridge often used as a weaning food.

Nearly all children were given water from the first few days after birth. Most mothers interviewed knew that the "weighing people" advised against giving water to infants, but they did not follow that advice. A large proportion of the mothers gave their infants milk, porridge, soup, and fruit before the infant was six months old.

The most common food given to infants before they were one year old was fermented maize porridge. Whereas 60 percent of the infants 3-6 months old were being given porridge, 96 percent of those 7-11 months old were getting porridge. Many mothers stressed the importance of giving porridge to complement breast milk. Mothers of well-nourished children said infants should not be given a wide variety of foods, because it is unhealthy. Porridge is the main food given until a child is one year old.

Mothers prepared their children to take food other than breast milk by both early tasting of foods and cleaning their tongue to improve the infant's sense of taste. Because porridge was considered the most appropriate food for infants, it was regarded as important that the baby develop a liking for it.

Contrasting practices

The observations made at five-minute intervals showed that mothers of malnourished children had more minutes of interaction with their child than mothers of well-nourished children did. This was particularly true of interactions involving physical touch: the mother holding, carrying, or bathing the baby. In addition, well-nourished infants slept about 30 percent more of the day than malnourished infants did.

Mothers of malnourished children encountered difficulties during infant feeding. Their infant had strong likes and dislikes for certain foods and the child would reject the food offered. Mothers were obliged to try different foods to get their child to eat something. Mothers of well-nourished infants, on the other hand, did not find the process of infant feeding difficult. They relied mainly on porridge as a weaning food, and many children received only porridge until they were one year old. Thus, malnourished children were fed a wide variety of foods before they were one year old, while well-nourished children received only a few foods.

Mothers of well-nourished infants responded more often to infant cues regarding feeding than mothers of malnourished infants did. In the interviews with the former, they clearly discussed the nature of crying and the more subtle cues indicating hunger. The study design had hypothesized that mothers breastfeed in response to cues from the infant and that well-nourished infants breastfeed more often than malnourished infants. Mothers of well-nourished children also noted signs that their child was satiated: the infant stopped suckling, started playing with the breast, or had a rounded stomach. Mothers of malnourished infants spoke of stopping their child from nursing.

Mothers of well-nourished children had better access to child care from relatives than mothers of malnourished children did. More mothers of the former could call upon their own mother and their husband to care for their child than mothers of malnourished children could.

Over

CONCLUSIONS

The contrast between well-nourished and malnourished children related to the variety of foods consumed suggests that those with poor nutritional status may have often been sick. Sick children lose their appetite, become finicky eaters, and demand more care. When a child has little appetite, a mother will try different foods to interest the child in eating. If this is correct, it makes it even more important to rapidly restore a child's health so s/he can resume normal eating.

The study found that mothers with caretakers available for their child more often had a well-nourished infant than those with no caretaker available. The relative most often mentioned as an alternate caretaker was the mother's own mother. The second was her husband. In addition, the observations showed that mothers with alternate caretakers were able to rest or sleep more themselves than those without. In other words, the availability of a social support network around young children may have an impact on a child's nutritional status.

RECOMMENDATIONS

- Since fermented maize porridge (koko) is so widely used as a complement to breastfeeding in the Kumasi region, nutrition education programs should find ways to enrich the porridge. Both mothers and infants prefer this porridge to the commercially produced weaning food. For example, mothers could add legumes or another food high in protein.
- Nutrition education programs should emphasize the importance of giving babies clean water to reduce the transmission of disease. Given the nearly universal practice of giving water to infants soon after birth, it seems important that mothers who give water to their infants use potable water.
- Some way should be found to ensure all mothers have a caretaker for their infant to allow the mother to work and to rest more freely. In the absence of available relatives, some other grouping of persons could be created to assist mothers in child care.

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